Minutes, 1/26/04 Tevatron BPM Upgrade Meeting
Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. VME, MVME and ethernet updates.
2. Measurements
3. AOB.

0. Videoconference the meetings.

- Margaret Votava asked whether the Tev BPM meetings can be videoconferenced. She will bring her camera to the next meeting and will see how well that works.

1. VME, MVME and ethernet updates.

- No update on the VME crates.
- An MVME discussion was held. The agressive schedule for the project argues for MVME 26xx rather than 55xx. The consensus of the group is that we should purchase the 512 MB version (rather than the 256 MB version). Margaret will proceed.
- We had a short discussion of the ethernet requirements for the service buiildings. It was postulated that 10 Mbit is sufficient for the Tev BPM project. However, it would be very desirable to have an estimate of the data rate required for the Tevatron BPM.

2. Measurements

- Bob Webber showed a plot of closed-orbit measurements from vertical positions at A14 using the Echotek/53 MHz setup and also a vertical position from one of the BPMs in A2 using Warren Schappert's setup (Echotek with 30 MHz filter, sampling at 75 MHz). The two measurements track each other extremely well over a 12 hour period. Bob later sent me a plot showing similar behavior from TPOS1 (one of the BPMs) and A4Q3, one of the quads. The plots track each other pretty well. Both of these plots are deposited in AD Doc DB number 792.

- Rob Kutschke showed his latest pbar separation information. He showed 4 plots from a store on December 4, 2003. These can be found in the same place as Bob's plots -- AD Doc DB number 792. All corrections are made as described in the last meeting. Rob will write all of this up in a note very soon.

The bottom right plot shows the predicted pbar position and the measured position. The difference is about 1.5 mm. This is still not a proof that we can measure the pbar position using the frequency domain subtraction technique, but it is certainly promising.

We discussed how we would be able to prove to ourselves that we are indeed measuring pbar positions and measuring them properly.

3. Beam synch clock.

- Jim mentioned that there are 4 fibers needed for the test stand being established in Feynman. Two will be required for ACNET, one for the TCLK signals, and one for the Beam Synch Clock. Once verified we will have to make sure that we have all 4 fibers. We will need a downtime to hook up the signals (and not disturb the running acclerator). Also some UCD cards will be needed for the test stand.

4. AOB.

Meetings will be held Wednesday, Jan 28 at 11:15 (Project meeting) and Thursday, Jan 29 at 1:30 (special topic(s) to be announced).